## ABSTRACT OF THE INVENTION

[0045] There is provided a compression gauge assembly for diagnosing pressure variances of an engine cylinder(s). The gauge assembly comprises a gauge sensor in communication with the engine cylinder(s). The gauge sensor is operative to detect compression stroke pressures within the cylinder(s). A gauge controller is in communication with the gauge sensor. The gauge controller includes a comparator circuit operative to compare detected compression stroke pressures within the cylinder(s) and to derive the pressure variances therebetween. A gauge display is in communication with the gauge controller for displaying the derived pressure variances.